



## ATTACHMENT A

### Remarks

Claims 1, 8, 9, 11 and 14 have been rejection under 35 USC 102(b) as being "anticipated by" "DE '818." This rejection is respectfully traversed although independent claims 1 and 14 have been amended to even more clearly define over the cited reference.

Turning first to the amendments to the claims, claims 1 and 14 have been amended to recite that "upon insertion of a nozzle though the collapsible aperture the diaphragm closes around the nozzle to prevent fluid escape whereas upon retraction of the nozzle the diaphragm itself initiates closure of the collapsible aperture." This amendment is supported by, and the importance of this feature is stressed in, lines 21-25 of page 10 which recite "[i]mportantly, the diaphragm forms about the nozzle 64 to prevent the escape of gasoline vapours from the filler tube or tank." Further support is provided by Figure 6.

Turning to the newly relied on reference, DE '818, it is noted that the compressor valve of this reference is designed to be installed in a rotary piston compressor (see Figure 1). This compressor is typically used in a refrigeration cycle wherein the refrigerant is circulated between a compression chamber within the compressor body 1, and the enclosed chamber outside of the compressor body 1. The rotary piston compressor of the reference uses the rotary piston to compress refrigerant within the compression chamber. Therefore, the compression chamber defines a high pressure side of the compressor valve of, for example, Figures 4-6 to which the Examiner makes specific reference. It is respectfully submitted that this reflects a significant difference from the present invention wherein the conical valve diaphragm is oriented toward the high pressure side of the valve, and is in an opposite orientation to that disclosed in the reference.

Further in contrast with the present invention, the compressor valve of the reference cannot and would not be used with a nozzle (as now claimed in claims 1 and 14) since the valve cannot be accessed because it is housed within the enclosed chamber. Moreover, it is respectfully submitted that a nozzle or needle would not be inserted into such a construction (including body or wall 1) given the use of the valve as

a pressure release valve, the orientation of the valve (with the apex on the outside, i.e., low pressure side) and the (hidden) nozzle size restriction imposed by the “hollow fastening screw section” 7 of the reference.

In summary, there are at least two fundamental differences between the present invention as defined in independent claims 1 and 14, as amended, and DE '818: (1) the valve of the invention relies on fluid pressure at a fluid outlet, and on a high pressure side of the valve, for closure of the valve, whereas the compressor valve of the reference is arranged to contain high pressure gas at the inlet thereof (and not at the outlet); and (2) the present invention is of a construction (including the tapered diaphragm walls thereof) to operate in conjunction with a nozzle, which, as explained above, is completely contrary to the teachings of the DE '818 reference.

Claims 1-4, 7-9 and 15 have been rejected under 35 USC 103(as) as being unpatentable over the previously cited Souza reference in view of DE '818. In addition, claim 10 has been rejected under 35 USC 103(a) as unpatentable over the same combination and further in view of a Scheffer patent whereas claims 2 and 3 have been rejected under 35 USC 103(a) as being unpatentable over the combination of Souza and DE '818 and further in view of a Vest patent. Finally, claims 5 and 6 have been rejected under 35 USC 103(a) as being unpatentable over the Souza and DE '818 references and further in view of Taylor. These rejections are respectfully traversed.

First, as the Examiner admits, the duckbill configuration of the valve of the Souza patent is clearly different from the conical-shaped configuration of the present invention. In particular, it is clear that the valve of the Souza patent is not rotationally symmetrical about the longitudinal axis thereof (i.e., a longitudinal axis that passes through the apex of the diaphragm) as recited in the claims. Further, the duckbill configuration of the Souza valve does not permit equal deflection of the lip members at its lip opening, but rather results in unequal forces at the opening around the periphery thereof and, depending on the size of an associated ejector or nozzle, provides a less effective seal about the injector to prevent reverse flow. Further, the duckbill configuration of the reference does not enable fabrication or manufacturing with dies or other molding members which are rotatable independently of one another. In other words, the dies

used in forming the duck-bill configuration of the Souza patent must not only be aligned axially, but also aligned rotationally, in order to form the duck-bill configuration.

Further, as pointed out previously, in important embodiments of the Souza patent, the duck-bill configuration is specifically designed for use as a two-way valve in, for example, the application thereof to a toy balloon. In this application, the slit-like opening 26 can be opened by deforming the main body. A force is applied to the main body and aligned parallel to the slit opening of the duck-bill valve as set forth in column 3, lines 58-60.

It is respectfully submitted that given the actual teachings of the references, the combination here is necessarily the improper product of hindsight. As pointed out above, the compressor valve of DE '818 is adapted to be installed in a rotary piston compressor which uses the rotary piston to compress refrigerant within the compression chamber. Thus, the compression chamber defines the high pressure side of the compressor valve of the specific figures to which the Examiner has made reference (Figures 4-6). In contrast, the valve of the Souza patent is used in connection with, for example, a toy balloon. Given the very different nature of the compressor valve of DE '818, the combination of the teachings of the two references is necessarily based on hindsight, in that one looking to address some problem in connection with the valve of the Souza patent certainly would not turn to the DE '818 reference and would not borrow features from the compressor valve of the DE '818 reference.

With respect to the dependent claims, these claims are patentable for at least the reasons set forth above in support of the patentability of the parent claims so that it is not necessary to discuss the other references that have been relied on.

Allowance of the application in its present form is respectfully solicited.

**END REMARKS**